

ATTACHMENT A
INITIAL BASIS OF DESIGN DOCUMENT
City of Bothell
Fire Station 42 and 45 Replacement

Scope

Rebuild two new fire stations on existing sites and facilitate temporary facilities during construction of the new stations.

Project Location

- Station 42: 10726 Beardslee Blvd, Bothell, WA 98011
- Station 45: 1608 217th Pl SE, Bothell, WA 98021
- Temporary Facilities: Locations are to be determined.

Project Goals

The new stations shall fit into the surrounding neighborhoods. They shall feel inviting to the community. The look of the stations shall be contemporary/timeless and comfortable, as these are homes away from home for the staff. The City of Bothell and the Fire Department have established the following project goals.

- Provide effective and efficient response to community emergencies.
- Provide comfortable and safe livability for crews.
- Provide functional work spaces and meeting rooms for crews, administration and community.
- Include artwork in support of the Percent for the Arts program. Art is preferably integral to the project and incorporated in the site or building plans. The art work may be Fire Service based and/or related to events such as 9-11.
- Obtain United States Green Building Council (USGBC) LEED Silver certification or better.
- The City's standard requirements include:
 - Tadiran telecom equipment
 - Avigilon camera security system
 - HP/Aruba network equipment
 - Delta Control HVAC
 - Johnson Control P2000 Entry Control System

Program/Design Requirement

The pre-design report shall be considered for program requirements and approximate space allocations. Should there be discrepancies between the pre-design report and this document,

the more stringent requirements shall govern. Any discrepancy should be brought to the attention of the City.

Station 42:

- Accommodate housing for 13 fire fighters.
- Provide 5 bay drive through apparatus bay with two bays large enough to accommodate a ladder truck.
- Provide 48 food lockers, one for each crew member, along with large pantry for station for staff of 48.
- Provide kitchen to support 6 refrigerators.
- Provide 3 bay reserve apparatus bay. May be stand-alone or attached to main building.
- Provide separate kitchen for day staff including stove/oven, and dishwasher.
- Include large monitors for RAADAR (Real Time Agency Activity Display and Reporting) located by watch office and Battalion Chief (BC) office and Deputy Chief (DC) offices.
- Provide functional work space for watch office (firefighter training and data entry) 6 work stations.
- Provide individual offices for Company officer and Battalion Chief. Battalion Chief and Company officer offices must be able to provide room to conduct daily meetings with at least 3 people. Each office could include a murphy bed and serve as a dorm.
- Provide Fire Chief office to accommodate meeting space for 6-8.
- Administration staff may be located in open office with space for 6.
- Training Division office should include 2 individual offices for staff and an open office for 2-3.
- Provide storage for Public Information Officer (PIO)/event supplies.
- Provide record retention secured storage room.
- Provide separate showers and locker rooms (men and women) for uniformed day staff.
- Provide a fire signal in the road as required for Right of Way improvements.

Station 45:

- Accommodate housing for 8 fire fighters.
- Provide 4 bay apparatus bay, with 2 bays large enough to accommodate ladder truck.
- Office for police department with separate entrance from fire station; ensure police parking is away from crew quarters and windows.
- Provide 24 food lockers, one for each crew member along with large pantry for station for staff of 24.
- Provide kitchen to support 3 refrigerators.
- Provide large monitors for RAADAR by printer/watch office.
- Provide functional work space for watch office (firefighter training and data entry) 4 work stations.
- Provide individual office for Company officer, including a murphy bed to serve as a dorm.

- Stations 42/45: Interior finishes and MEP system shall meet Healthy In/Healthy Out best practices.
- Provide sufficient parking for the needs of the facilities including secured Parking for 24-hour crews.
- Provide ability for fire apparatus to be washed inside.
- Provide apparatus cleaning area in bay to accommodate sink, buckets, mops, brushes etc. Hot and cold-water hose bibs.
- Provide small shop/minor maintenance room.
- Separate decontamination area for Emergency Medical Services (EMS) related calls, dirty zone, and decontamination shower off of EMS room.
- Provide bathroom and sink with direct access from bay.
- Provide secured public entrance lobby vestibule with bathroom, sitting area, and Blood Pressure (BP) check station.
- Provide Personal Protective Equipment (PPE) extractor and drying room.
- Provide Self-Contained Breathing Apparatus (SCBA) Shop, clean room for testing and maintenance of SCBA.
- Provide individual dorms for crewmembers, close to bay to enhance reaction time, with individual climate control, emergency alerting light reduction, small desk, and light outlets. Crew lockers outside of dorms.
- Provide weight room and wellness center large enough to handle assigned crews at each station. Large doors to allow for movement of equipment in and out. This room should also have tall ceilings to allow for Stairmaster and overhead weight lifting.
- Include a water bottle filling station in workout rooms.
- Provide private bathrooms to accommodate crews including sink, toilet and shower (No gang showers).
- Provide training classroom with AV, projector and multi plugs throughout classroom to facilitate command training programs. Include Storage room adjacent to classroom for training material. Training classroom should have a sink, coffeepot area and trash/recycle receptacles along with small cabinet.
- Provide secure medicine room.
- Provide bathroom and sink accessible directly from apparatus bay.
- Dispatch/altering station, radio station and Main Distribution Frame/Internal Distribution Frame (MDF/IDF) can be located in one room if the MDF/IDF can be isolated and secured.
- Include illuminated exterior station signs for 42 and 45.

System Requirement

- Provide Direct Digital Controls (DDC) Global Heating Ventilation and Air Conditioning (HVAC) control system. Systems shall be compatible and tie-in with current City enterprise systems.

- Entrance control system, video monitoring of apron, parking lot and front lobby that shall be compatible and tie-in with current City enterprise systems.
- Provide vertical front bay doors that open in 6 seconds or less.
- Provide effective apparatus diesel exhaust evacuation system.
- Provide escalating tones with similar lighting. Include count-down clock in bay and individual alerting selection.
- Provide alert strobes in bay, maintenance room and workout room.
- Include stove and BBQ auto shut off and reset.
- Provide stairwell lighting for safe travel after dark.
- Provide Emergency Generator with 72 hours continual operations.
- Technology Requirements:
 - CAT6 or better data cable structure with dedicated points of demarcation (IDF/MDF).
 - Fiber optic demarcation/termination points for inter-building and external fiber optic connections
- IDF/MDF rooms shall have adequate HVAC
- Radio requirements: To be determined.
- Dispatch requirements: Provide alerting for separate areas within each station.
- Provide compatible WIFI 802.11ac, signal strength -65 dBm or greater throughout all of building. This is considered City network access WIFI.
- Ensure that fire department apparatus cellular will function inside the stations.
- Provide convection heating in bays with direct beam climate control.

Temporary Facility Requirements

Establish fully functional, safe and secure temporary fire stations for both Station 45 and 42 unless design and construction phasing enable continued uninterrupted operations during construction of the new stations. Provide storage of non-essential equipment while buildings are under construction. This may include packing, moving and storage along with delivery and unpacking when the station is completed. The requirements listed below assume there will only be one temporary facility at any given time. Should the phasing change to concurrent construction, the requirements may need to increase to accommodate additional staff, apparatus etc.

Station 42:

- Capacity to house Engine, Aid, Ladder and Battalion apparatus for 42.
- Accommodate six (6) people on duty (6 sleeping accommodations) with up to 24 assigned to station.
- 11 day-staff personnel will be moved to alternative location during the remodel phase of Station 42.
- Provide access to reserve apparatus during remodel. This can be in a separate location form the temporary facility.

Station 45:

- Engine and Aid unit for five (5) people on duty (5 sleeping accommodations) with up to 12 assigned to station.

Station 42/45:

- Include alerting, phones, City network, radio, emergency power, parking, dorms, offices, security, delineation for apparatus and signage, power shut off when alerting.
- Accommodate water run off with vehicle cleaning.
- Provide apparatus bay(s) with minimum temperature requirement of 40 degrees.
- Provide motor driven apparatus door(s) for temporary apparatus bay(s).
- Provide apparatus exhaust system.
- Provide back up power for critical systems.

Fixtures, Furniture and Equipment (FF&E) - Permanent and Temporary Facilities

The City intends to reuse some existing FF&E. It will be the responsibility of the Design Builder to move and re-install these items:

- Bunker gear storage lockers
- SCBA systems
- Washers/Dryers (at temporary facilities only)
- TV, DVD, VCR
- Partial workout equipment

All other Fixtures Furniture and Equipment will be the Design-Builders responsibility

Alternates – Permanent Facilities

The City would like to include as many alternates as possible in the base scope of the project.

Station 42:

- Provide relaxed duty area with 2 level stadium seating enough to hold 12 full size recliners, 6 each level. Include AV connections in wall for wall mounted TV to include ability to view training videos.
- Provide secondary conference room with AV capabilities.
- Provide a diesel and/or gas fuel tank on site at station 42 with a capacity of 1,000 gallons.
- Provide movable separation wall in training room to provide for two classrooms.
- Provide training tower/facility.

Station 45:

- Provide floor lighting for station 45 bay to guide apparatus when backing up

Station 42/45:

- Provide multiple large storage rooms (secured).
- Provide programmable reader boards in front of stations for public outreach.
- Provide apparatus indicator light bar.
- Provide apparatus bay door stop and go lights to ensure bay doors are open especially rear vertical.
- Include USB electrical outlets in offices and dormitories.
- Provide station paging system and front door video feed to main crew area.
- Lighting adjusts to reduced level at 1800 hours automatically throughout stations
- Include blackout windows/shades for dorms.
- Include automatic shades for training room.
- In floor electrical and AV plug ins in training room.

Applicable Codes/Certification/Other Requirements

- NFPA standards
- WAC 296.305
- Healthy In, Healthy Out
- USGBC LEED Certification latest version
- Bothell Municipal Code Chapter 3.75 Percent for the Arts
- Bothell Municipal Code Chapter 2.45 Bothell Arts and Festivals Commission
- NORCOM regional dispatch
- Any/all codes to meet requirements by local Authorities Having Jurisdiction (AHJ)